

## Two new *Hydrotaea* species from Taiwan (Diptera: Muscidae)

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**Abstract:** Two new *Hydrotaea*-species, *H. iwasai* sp. nov. and *H. lalashanensis* sp. nov., are described and figured from Taiwan.

Key words: Muscidae, genus *Hydrotaea*, new species, Taiwan

Up to now, nine species belonging to the genus *Hydrotaea* are recorded from Taiwan including four species formerly assigned to the genus *Ophyra* (Shinonaga and Kano, 1987). In the present paper, I described and figured two new species, one closely related to *H. calcarata* Loew, 1858 from Japan and the other is similar to *H. cyrtoneurina* (Zetterstedt, 1845) from Denmark, however, both new species are different from *H. calcarata* and *H. cyrtoneurina* in the shape of legs and the abdominal pattern. Type specimens are deposited in the National Science Museum, Tokyo.

### *Hydrotaea iwasai* sp. nov.

**Male.** Body length about 6 mm.

Head: Eyes large, semispherical and bare; frons narrow, slightly narrower than front ocellus; parafrontals narrow, black with grayish dust; parafacials black, bare; *ori* confined to lower half of frons; *ors* absent; antenna black, length of 3rd segment about 2.0 times that of 2nd; arista dark brown, bare; palpi black.

Thorax: Scutum and scutellum black, slightly covered with grayish dust; *ac* 0+1; *dc* 2+4; *ia* 1+3; *prs* 1; *h* 2; *ph* 1; *nt* 2; *pra* absent; *sa* 1; *pa* 2; scut 2 lateral, 1 preapical; 2 or 3 irregular discals; *st* 1+1; propleuron and prosternum bare; mesothoracic spiracle dark brown.

Wings: Hyaline, veins dark brown; *r*<sub>1</sub> and *r*<sub>4+5</sub> bare; *m*<sub>1+2</sub> straight; *m-m* slightly bending toward base; squama dark brown, lower squama triangular with concolorous marginal

cilia; halteres black.

Legs: *f*<sub>1</sub> with a pair of rigid protuberance on the distal part of ventral surface, a row of long *pd*, several long *pv* on basal half; *t*<sub>1</sub> without *p*-seta, cutting on ventral surface; *f*<sub>2</sub> with a row of long *ad* on basal half, a row of *pd* on distal half; *t*<sub>2</sub> with 2 *p*-seta; *f*<sub>3</sub> with a row of *ad*, several *pv* on distal 1/3; *t*<sub>3</sub> with long bristles curled on apices on middle part of ventral surface.

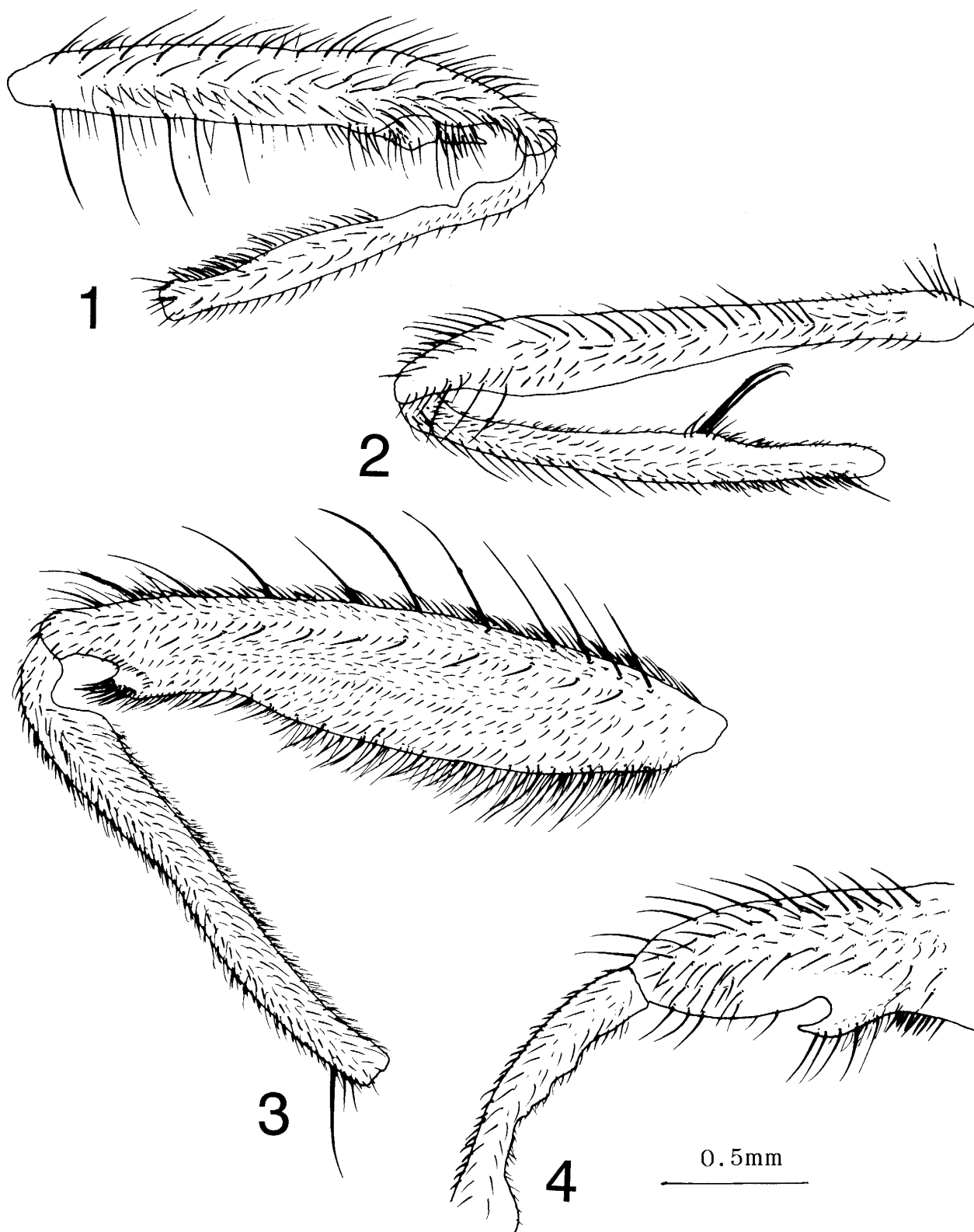
Abdomen: Dark brown slightly covered with grayish dust; 2nd to 5th tergites with obscure dark longitudinal stripes, stripes on 2nd and 3rd slightly darker and broad.

**Female.** Body length about 5.5 mm. Frons widely open, about 0.28 of head width; frontal vitta dark brown; interfrontal cruciate bristles present; several inclinate *ori* and 1 proclinate and 2 reclinate *ors* present; anterior part of parafrontal and posterior part of parafacial metallic black; other characters similar to those of the male except character of legs.

**Holotype.** ♂, Fanshan, Puri, 16 March 1981, M. Iwasa.

**Paratypes.** 1♂, 1♀, same data as holotype.

**Remarks.** The present species is similar to *H. calcarata* Loew in the shape of the hind tibia; however, the shape of the rigid protuberance of the fore femur is different from that of *H. calcarata* and also differs from *H. calcarata* by having the dark abdomen with slightly covered with grayish pollen. In *H. calcarata*, the abdomen is



Figs. 1-4. *Hydrotaea* spp., lateral view of legs. 1, *H. iwasai* sp. nov., right fore leg; 2, ditto, right hind leg; 3, *H. lalashanensis* sp. nov., left fore leg; 4, *H. cyrtoneurina* Emden, left fore leg.

densely covered with grayish dust and with clear longitudinal stripes on third tergite.

***Hydrotaea lalashanensis* sp. nov.**

*Male.* Body length 8.5 mm.

Head: Eyes large, densely covered with long hairs; frons narrow, about 0.08 of head width at narrowest point and 0.13 at vertex; parafrontals narrow, black; parafacials black, bare, densely covered with grayish dust; *ori* confined to entire length of frons; *ors* absent; antenna black, length of 3rd segment about 3.0 times that of 2nd; arista dark brown, short haired; palpi black.

Thorax: Scutum black with 4 dark longitudinal stripes on presutural area, anterior part with dense grayish dust; scutellum black, slightly covered with grayish dust; *ac* 1+1; *dc* 2+3; *ia* 0+2; *prs* 1; *h* 2; *ph* 1; *nt* 2; *pra* absent; *sa* 1; *pa* 2; *scut* 2 lateral, 1 preapical; *st* 1+1; propleuron and prosternum bare; mesothoracic spiracle dark brown.

Wings: Hyaline, veins dark brown;  $r_1$  and  $r_{4+5}$  bare;  $m_{1+2}$  straight;  $m-m$  slightly bending toward base; squama light brown, lower squama triangular with concolorous marginal cilia; halteres black.

Legs:  $f_1$  with a pair of rigid protuberance on the distal part of ventral surface, a row of long *pd*, several long *pv* on basal half;  $t_1$  without *p*-setae, cutting on ventral surface;  $f_2$  without long bristles, 1 preapical *ad*;  $t_2$  with 2 *p*-setae;  $f_3$  with a row of *ad* and *pv* on distal 1/3;  $t_3$  with 1 *ad*, 3 *av*, 1 *pd*.

Abdomen: Dark brown slightly covered with grayish dust; without any stripes or marks.

*Female.* Body length about 8.0 mm. Frons widely open, about 0.32 of head width; frontal vitta dark brown; interfrontal cruciate bristles present; about 10 inclinate *ori* and 1 proclinate and 2 reclinate *ors* present; parafrontal and parafacial black with grayish dust; other characters similar to those of the male except character of legs.

Holotype. ♂, Lala shan, 1,600 m, 26 Oct. 1985, R. Kano.

Paratypes. 1 ♀, Fanshan, 1,650 m, 6 Nov. 1985, M. Iwasa.

Remarks. This species is closely related to *H. cyrtoneurina* in external features, but differs from the latter species by having 3 postsutural *dc* and in the shape of the fore legs as shown in Figs. 3, 4.

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